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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,641	01/02/2002	Dave A. Wiebelhaus	501007-A-01-US (Clark)	9141

24504 7590 02/13/2003

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EXAMINER

MAYO III, WILLIAM H

ART UNIT PAPER NUMBER

2831

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,641

Applicant(s)

WIEBELHAUS ET AL.

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

Specifically, John A Milsaps name contains a non initialed alteration and therefore is defective.

Drawings

2. The drawings are objected to because Figures 4 and 6 lack the proper cross hatching which indicates the type of materials which may be in an invention.

Specifically, the cross hatching to indicate the insulative separating element is improper. The applicant should refer to MPEP Section 608.02 for the proper cross hatching of materials. Correction is required.

3. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

6. The abstract of the disclosure is objected to because throughout the abstract, it contains claim terminology such as "said" and "comprised", which is improper language for the abstract.

7. The abstract also refers to purported merits or speculative applications of the invention which is improper content for the abstract.

Correction is required. See MPEP § 608.01(b).

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

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- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

8. The disclosure is objected to because of the following informalities: The applicant should replace the heading "Detailed Description", with the proper heading as shown above.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Claim 1 recites the limitation "the corrugated tape member" in line 4, which is confusing and renders the claim indefinite. It is unclear whether the applicant is referring to the previous mentioned "at least one corrugated tape member" or introducing a new corrugated tape member. If the applicant is referring to the previous mentioned term, then he/she should recite the term with consistency. If the applicant is referring to a new corrugated tape member, then he/she should make the term more distinguishable.

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12. Claim 5 recites the limitation "the corrugated tape member" in lines 1-2, which is confusing and renders the claim indefinite. It is unclear whether the applicant is referring to the previous mentioned "at least one corrugated tape member" or introducing a new corrugated tape member. If the applicant is referring to the previous mentioned term, then he/she should recite the term with consistency. If the applicant is referring to a new corrugated tape member, then he/she should make the term more distinguishable.

13. Claim 6 recites the limitation "the corrugated tape member" in lines 1-2, which is confusing and renders the claim indefinite. It is unclear whether the applicant is referring to the previous mentioned "at least one corrugated tape member" or introducing a new corrugated tape member. If the applicant is referring to the previous mentioned term, then he/she should recite the term with consistency. If the applicant is referring to a new corrugated tape member, then he/she should make the term more distinguishable.

14. Claim 7 recites the limitation "the corrugated tape member" in lines 1-2, which is confusing and renders the claim indefinite. It is unclear whether the applicant is referring to the previous mentioned "at least one corrugated tape member" or introducing a new corrugated tape member. If the applicant is referring to the previous mentioned term, then he/she should recite the term with consistency. If the applicant is referring to a new corrugated tape member, then he/she should make the term more distinguishable.

15. Claim 8 recites the limitation "the corrugated tape member" in lines 1-2, which is confusing and renders the claim indefinite. It is unclear whether the applicant is referring to the previous mentioned "at least one corrugated tape member" or introducing a new corrugated tape member. If the applicant is referring to the previous mentioned term, then he/she should recite the term with consistency. If the applicant is referring to a new corrugated tape member, then he/she should make the term more distinguishable.

16. Claim 9 recites the limitation "the corrugated tape member" in lines 1-2, which is confusing and renders the claim indefinite. It is unclear whether the applicant is referring to the previous mentioned "at least one corrugated tape member" or introducing a new corrugated tape member. If the applicant is referring to the previous mentioned term, then he/she should recite the term with consistency. If the applicant is referring to a new corrugated tape member, then he/she should make the term more distinguishable.

17. Claim 9 recites the limitation "the tape" in line 2. There is insufficient antecedent basis for this limitation in the claim because there has not been any previous reference to a tape in previous lines of the claims.

18. Claim 9 recites the limitation "the corrugated tape" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim because there has not been any previous reference to a tape in previous lines of the claims.

19. Claim 11 recites the limitation "the corrugated tape member" in lines 1-2, which is confusing and renders the claim indefinite. It is unclear whether the applicant is

referring to the previous mentioned "at least one corrugated tape member" or introducing a new corrugated tape member. If the applicant is referring to the previous mentioned term, then he/she should recite the term with consistency. If the applicant is referring to a new corrugated tape member, then he/she should make the term more distinguishable.

20. Claim 11 recites the limitation "the width corrugated tape member" in lines 2-3, which is confusing and renders the claim indefinite. It is unclear whether the applicant is referring to the previous mentioned "at least one corrugated tape member" or introducing a new corrugated tape member. If the applicant is referring to the previous mentioned term, then he/she should recite the term with consistency. If the applicant is referring to a new corrugated tape member, then he/she should make the term more distinguishable.

21. Claim 11 recites the limitation "the tape" in line 3. There is insufficient antecedent basis for this limitation in the claim because there has not been any previous reference to a tape in previous lines of the claims.

22. Claim 12 recites the limitation "the corrugations" in line 1. There is insufficient antecedent basis for this limitation in the claim because there has not been any previous reference to a tape in previous lines of the claims.

23. Claim 12 recites the limitation "the tape" in line 3. There is insufficient antecedent basis for this limitation in the claim because there has not been any previous reference to a tape in previous lines of the claims.

24. Claims 2-4, 10, and 13-16 are depended upon rejected claim 1 and therefore are rejected.

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

27. Claims 1-8, 11-19, and 22-25, 28-30 rejected under 35 U.S.C. 103(a) as being unpatentable over Neveux, Jr (Pat Num 6,506,976, herein referred to as Neveux) in view of Haugwitz (DE 697,378). Neveux discloses an electrical cable (Figs 2-5) having reduced cross talk (Col 1, lines 7-10). Specifically, with respect to claim 1, Neveux discloses an electrical cable (20, Fig 2) comprising a plurality of longitudinally extending twisted pairs (14) of conductive elements (i.e. conductors), at least one tape member

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(22) separating the at least one of the twisted pairs of conductive elements (top 14) from an adjacent one of the twisted pairs of conductive elements (middle 14), wherein the tape member (22) separates and maintains spacing between the twisted pairs (14) separated by the tape member (22, Col 3, lines 55-59), and a dielectric jacket (12) surrounding and enclosing the plurality of twisted pairs (14). With respect to claim 2, Neveux discloses that the cable (20) comprises four twisted pairs (14, Fig 2) and the tape member (22) separates two of the twisted pairs (middle 14) from the remaining two twisted pairs (top and bottom 14). With respect to claim 3, Neveux discloses that the cable (20) comprises more than one tape member (top and bottom 22). With respect to claim 4, Neveux discloses that the cable (20) comprises at least one tape member (top 22) and at least one other means (bottom 22) for separating and maintaining spacing between the twisted pairs (14, Col 3, lines 55-59). With respect to claim 5, Neveux discloses that the tape member (22) may be made of a flexible dielectric material (Col 1, lines 60-67). With respect to claim 6, Neveux discloses that the tape member (22) may be made of polyamide woven glass, polyvinyl chloride, one or more polyolefins, and one or more fluoropolymers (Col 1, lines 60-67). With respect to claim 7, Neveux discloses that the tape member (22) has a width of approximately 0.12-0.4 inches (i.e. 0.125-.250 inches, Cols 3-4, lines 67 & 1 respectively). With respect to claim 8, Neveux discloses that the tape member (22) has a thickness of approximately 8-12 mils (i.e. 2-20 mils, Col 4, lines 2-3). With respect to claim 13, Neveux discloses that the cable (20) comprises a plurality of tape members (top and bottom 22) for separation of the twisted pairs (14). With respect to claim 14, Neveux discloses that the cable (20) comprises a

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tape member (top 22) for separating at least one of the twisted pairs (top 14) from the remainder of the twisted pairs (14). With respect to claim 16, Neveux discloses that the tape member (22) may be made of a fire retardant polypropylene material (i.e. FEP known as TEFLON, Col 3, lines 63-64). With respect to claim 17, Neveux discloses a tape member (22) being incorporated in an electrical cable (20) to separate twisted pairs of conductive elements (14) contained therein, comprising a length of the tape member (22) configured along a length of the twisted pairs (14) and electrical cable (20, Col 3, lines 55-60). With respect to claim 18, Neveux discloses that the tape member (22) has a width of approximately 0.12-0.4 inches (i.e. 0.125-.250 inches, Cols 3-4, lines 67 & 1 respectively). With respect to claim 19, Neveux discloses that the tape member (22) has a thickness of approximately 8-12 mils (i.e. 2-20 mils, Col 4, lines 2-3). With respect to claim 24, Neveux discloses that the cable (20) comprises a plurality of tape members (top and bottom 22) for separation of the twisted pairs (14). With respect to claim 25, Neveux discloses that the cable (20) comprises a tape member (top 22) for separating at least one of the twisted pairs (top 14) from the remainder of the twisted pairs (14). With respect to claim 28, Neveux discloses that the tape member (22) may be made of a flexible dielectric material (Col 1, lines 60-67). With respect to claim 29, Neveux discloses that the tape member (22) may be made of polyamide woven glass, polyvinyl chloride, one or more polyolefins, and one or more fluoropolymers (Col 1, lines 60-67). With respect to claim 30, Neveux discloses that the tape member (22) may be made of a fire retardant polypropylene material (i.e. FEP known as TEFLON, Col 3, lines 63-64).

However, Neveux doesn't necessarily disclose the tape member being corrugated (claims 1 & 17), nor the cable comprising at least one corrugated tape member (claim 3), nor the corrugated tape being corrugated across a width of the tape (claim 11 & 22), nor the corrugations across the width of the tape comprising ridges and grooves having a corrugation length measured from a first ridge to a second ridge being approximately 0.06 inches (claim 12 & 23), nor the tape having a thickness exceeding the actual thickness of the tape member (claim 14), nor the tape member providing spacing of the conductors that equals or exceeds a spacing achieved by a flat tape member having an equivalent actual thickness (claim 15).

Haugwitz teaches electrical cable (Figs 1-10) having a cable separator in the form of an cross for maintaining the uniform spacings of the conductors (Page 2, left column, lines 15-20 & 40-55). Specifically, with respect to claims 1 & 17, Haugwitz teaches a cable (Figs 1-3) that comprises conductors (b) that are separated from each other by a insulative spacer (a) that may be corrugated (Page 2, right column, lines 75-85, Figs 9-10). With respect to claim 3, Haugwitz teaches that the cable (Figs 1-3) may comprise at least one corrugated member (Figs 9-10). With respect to claims 11 & 22, Haugwitz teaches that the corrugated tape member (Figs 9-10) is corrugated across a width of the tape (Figs 9-10, Page 2, right column, lines 75-85). With respect to claims 12 & 23, Haugwitz teaches that the tape (a) may be corrugated, comprising ridges (denoted 5) and grooves (denoted as 10) having a corrugation length (see Fig 10) measured from a first ridge to a second ridge (5). With respect to claim 14, Haugwitz teaches that the tape (Fig 9) has a thickness exceeding the actual thickness of the tape

member (Fig 9). With respect to claim 15, Haugwitz teaches that the tape member (Fig 9) provides a spacing of the conductors (b) that equals or exceeds a spacing achieved by a flat tape member having an equivalent actual thickness (see Figure 10).

With respect to claims 1, 3, 11-12, 14-15, 17, and 22-23, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the tape member of Neveux to comprise the corrugated tape configuration as taught by Haugwitz because Haugwitz teaches that such a configuration maintains the uniform spacings of the conductors (Page 2, left column, lines 15-20 & 40-55) and since it has been held that a change in form cannot sustain patentability where involved is only extended application of obvious attributes from a prior art. *In re Span-Deck Inc. vs. Fab-Con Inc.* (CA 8, 1982) 215 USPQ 835.

With respect to claim 12 & 23, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the length of corrugations of modified Neveux to comprise a length of approximately 0.06 inches, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980)

28. Claims 1, 9-10, 17, 20-21, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neveux (Pat Num 6,506,976) in view of Roberts (Pat Num 3,244,799). Neveux discloses an electrical cable (Figs 2-5) having reduced cross talk (Col 1, lines 7-10). Specifically, with respect to claim 1, Neveux discloses an electrical cable (20, Fig 2) comprising a plurality of longitudinally extending twisted pairs (14) of

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conductive elements (i.e. conductors), at least one tape member (22) separating the at least one of the twisted pairs of conductive elements (top 14) from an adjacent one of the twisted pairs of conductive elements (middle 14), wherein the tape member (22) separates and maintains spacing between the twisted pairs (14) separated by the tape member (22, Col 3, lines 55-59), and a dielectric jacket (12) surrounding and enclosing the plurality of twisted pairs (14). With respect to claim 17, Neveux discloses a tape member (22) being incorporated in an electrical cable (20) to separate twisted pairs of conductive elements (14) contained therein, comprising a length of the tape member (22) configured along a length of the twisted pairs (14) and electrical cable (20, Col 3, lines 55-60).

However, Neveux doesn't necessarily disclose the tape member being corrugated (claims 1 & 17), nor the corrugated tape being corrugated across a length of the tape (claims 9 & 20), nor the corrugations across the length of the tape comprising ridges and grooves having a corrugation length measured from a first ridge to a second ridge being approximately 0.12 inches (claims 10 & 21), nor the tape having a thickness exceeding the actual thickness of the tape member (claim 26), nor the tape member providing spacing of the conductors that equals or exceeds a spacing achieved by a flat tape member having an equivalent actual thickness (claim 27).

Roberts teaches electrical cable (Figs 1-7) having a dielectric tape in the form of surrounding a group of conductors, wherein the dielectric tape acts as a barrier, provides effective air spaces in the area of the cable core (Col 2, lines 51-55), provides pneumatic cushioning against mechanical forces applied to the cable that might

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otherwise damage the conductor insulation (Col 2, lines 58-61), and prevents moisture that may change the electrical properties of the cable (Col 2, lines 65-69). Specifically, with respect to claims 1 & 17, Roberts teaches a cable (Fig 2) that comprises conductors (10) that are surrounded an dielectric tape member (11) that may be corrugated (Fig 5). With respect to claims 9 & 20, Roberts teaches that the corrugated tape member (Figs 2 & 5) is corrugated across a length of the tape (11). With respect to claims 10 & 21, Roberts teaches that the tape (11) may be corrugated, comprising ridges (11b) and grooves (11b) having a corrugation length (X) measured from a first ridge (11b) to a second ridge (11b). With respect to claim 26, Roberts teaches that the tape (11) has a thickness exceeding the actual thickness of the tape member (Col 3, lines 1-10). With respect to claim 27, Haugwitz teaches that the tape member (11) provides a spacing around the conductors (10) that equals or exceeds a spacing achieved by a flat tape member having an equivalent actual thickness (Fig 3, Col 3, lines 1-10).

With respect to claims 1, 9-10, 17, 20-21, and 22-23, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the tape member of Neveux to comprise the corrugated tape configuration as taught by Roberts because Roberts teaches that such a tape configuration acts as a barrier, provides effective air spaces in the area of the cable core (Col 2, lines 51-55), provides pneumatic cushioning against mechanical forces applied to the cable that might otherwise damage the conductor insulation (Col 2, lines 58-61), and prevents moisture that may change the electrical properties of the cable (Col 2, lines 65-69) and

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since it has been held that a change in form cannot sustain patentability where involved is only extended application of obvious attributes from a prior art. *In re Span-Deck Inc. vs. Fab-Con Inc.* (CA 8, 1982) 215 USPQ 835.

With respect to claim 10 & 21, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the length of corrugations of modified Neveux to comprise a length of approximately 0.012 inches, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980)

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Clark et al (Pat Num 6,248,954), Despard (Pat Num 6,310,295), Watts (Pat Num 4,340,771), Simons et al (Pat Num 3,848,073), Prudhon (Pat Num 5,952,615), Gareis (Pat Num 5,486,649), Jachimowicz (Pat Num 3,233,036), Lemke (Pat Num 4,920,234), Justiss (Pat Num 5,453,031), all of which disclose cables having tape elements.

Communication

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (703)

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306-9061. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308-3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to be "WHM III", written in a cursive, stylized manner.

WHM III
February 9, 2003